

EXECUTIVE SUMMARY

Nearly eight years ago, on August 2, 1990, Iraq invaded Kuwait, marking the beginning of what is now known as the Gulf War. Within a week of Iraq's act, the United States began the largest single deployment of troops to a foreign country since the Vietnam era. The consequence of fighting this high-tech air and ground war was a quick and decisive victory, with relatively few casualties and no apparent acute effects from offensive use of the chemical or biological weapons that many had feared Iraq would use. However, the long-term impact of deployment to a desert environment on those troops, their families, government agencies, and the public was immense and unanticipated. At first, the significance of these health problems was minimized by many inside and outside of the government. It may be that our pride and confidence in our military's seemingly near-perfect performance was so great that nothing, not even the emerging health problems of many veterans of this war, was allowed to diminish this victory. The decisive outcome and the lack of anticipated widespread casualties from offensive use of chemical or biological weapons led many to look only at what was known at the time and see it as reinforcement of the common assumption that nothing happened connected with that deployment that would later affect the health of many Gulf War veterans.

In many ways, the story of the Gulf War experience can be seen as a microcosm for continued concerns regarding our nation's military preparedness and ability to respond effectively to health problems that may arise after deployments. This investigation found that in the Gulf War, U.S. military forces were not fully prepared to fight a war in which chemical or biological weapons might be used, and that this lack of readiness continues today. Both the Department of Defense and the Department of Veterans Affairs have given insufficient priority to matters of health protection, prevention, and monitoring of troops when they are on the battlefield and thereafter when they become veterans. The Department of Defense and the Department of Veterans Affairs have been negligent by failing to collect information adequately about, keep good health records on, and produce reliable and valid data to monitor the health care and compensation status of Gulf War veterans who are now ill. These agencies must find effective ways to manage and share information and work together to ensure that Gulf War veterans who face troubling health problems are helped—not hindered—in getting the health care and assistance they deserve.

BACKGROUND

This report tells the story of the events of the Gulf War that potentially have affected the health of some who served there and of the government's actions in response to those health problems. It is about foresight, it is about bureaucracy, and it is about accountability. It reflects a year-long

bipartisan special investigation by a team of experts assembled by the Senate Committee on Veterans' Affairs in the spring of 1997. The Committee on Veterans Affairs has actively conducted oversight on Gulf War veterans concerns since 1993, including holding committee and field hearings and issuing a 1994 staff report on this issue. The Special Investigation Unit on Gulf War Illnesses (SIU) examined the policies and actions of the U.S. government that have had an impact on the current health of the men and women who served during the Gulf War. The SIU's investigation encompassed specific areas of concern: the Department of Defense's (DOD's) plans and policies; the intelligence community's role; health risks encountered by U.S. troops during the war; record keeping before, during and after it; and the Department of Veterans Affairs' (VA's) accountability to and responsibilities for Gulf War veterans. At the same time, the SIU staff looked at the broader issues of the government's responsiveness to veterans' concerns and the ability of the DOD and VA to develop strong information and policy links. In the course of this investigation, the Committee held hearings in Washington and across the country. The SIU staff made numerous site visits to VA and DoD facilities, reviewed voluminous materials, and met with countless government employees, veteran service organization representatives, health professionals, scientists and researchers, and Gulf War veterans and their families. These investigative efforts by the SIU staff provided valuable insights into how to better prepare troops for future deployments, how to monitor troop health during deployments, and how to respond to veterans' health problems after those deployments.

Many veterans who served in Operations Desert Shield and Desert Storm are suffering from a range of physical disabilities, chronic ailments, and unexplained illnesses. In the period following the Gulf War, many ill Gulf veterans report having been told when they sought medical treatment that their ailments were "all in their heads." But, it is clear that many Gulf War veterans are suffering from very real physical problems, many of which are still evolving and the cause of which remains unclear. Effective treatments in many cases have yet to be identified, and even where treatment could be helpful, it is not uniformly provided to ill veterans. Veterans and their families are frightened about the long and short term consequences of these health problems. They are very concerned as to whether steps could have been taken before, during, and after the Gulf War deployment that might have prevented or minimized these health effects. They are concerned that lessons learned from the Gulf War will be applied in future conflicts to adequately warn and subsequently protect troops from avoidable environmental and manmade health risks. They also are concerned that individuals who develop health problems after serving in the Gulf War are encountering significant problems in obtaining adequate health care and timely compensation benefits from the government. Executive branch efforts, particularly on the part of the Departments of Defense and Veterans Affairs, that effectively address the problems described in this report are key to ensuring that Gulf War veterans get the help they need and to ensuring that veterans of future conflicts will not suffer the experiences of those from the Gulf War.

KEY FINDINGS

The SIU's investigation found that the perception that no one in government is helping or is concerned about the health problems of Gulf War veterans had some merit in the past. This investigation also revealed that many of the concerns described above remain well-founded. The progress that might be expected given the passage of time, amounts of money spent, and programs put in place to assist ill Gulf War veterans is not what it should be. While there does not appear to be any single "Gulf War syndrome," there is a constellation of symptoms and illnesses whose cause or causes eludes explanation at this time. It is beyond the expertise of this investigation to draw firm conclusions on the many ongoing scientific debates as to the causes of Gulf War veterans' unexplained illnesses, and these inquiries likely will continue for many years. There is a great need to monitor those veterans who are ill, and who may become ill in the future, to assess whether they are getting better or worse and to define better the long-term health effects they may experience. And, there is a need to eliminate the continuing profound delays and bureaucratic hurdles that Gulf War veterans encounter in their attempts to obtain compensation benefits for health problems that appear to be connected to their Gulf War service.

The SIU's investigators found that there is insufficient evidence at this time to prove or disprove that there was an actual low level exposure of any troops to chemical weapon nerve agents or that any of the health effects some veterans are experiencing were caused by such exposure. There is reliable evidence that there were chemical weapons at least at one site, Khamisiyah, that was destroyed by U.S. troops during the Gulf War, although this fact was denied by U.S. officials for many years. These denials appear to be the result of a negligent failure to investigate the facts fully and promptly, but there is no evidence to date that they resulted from a concerted conspiracy of silence. There is also reliable evidence that one individual suffered injury from exposure to mustard agent. However, new information continues to surface about previously unknown aspects of the extent of Iraq's chemical weapons capabilities during the Gulf War. For example, in June 1998, United Nations weapons inspectors uncovered evidence that Iraq also had missile warheads containing the deadly nerve gas VX, a fact that Iraq up to that time had consistently denied. The SIU also found that the Department of Defense needs to improve substantially its ability to forecast, identify, and respond to a wide range of battlefield exposures that can trigger adverse health effects. Concurrently, the VA must be better prepared to deal with the consequences of a variety of battlefield exposures, including but not limited to chemical and biological agents, which may become evident in affected veterans years after such exposures occur. Moreover, veterans of the Gulf War—both those still on active duty and those who have separated from military service—continue to encounter serious obstacles to obtaining medical care that addresses their needs in an appropriate and timely way. Too often, the burden on the ill Gulf War veteran (and indeed, on any ill veteran) to successfully negotiate VA's often-confusing bureaucratic maze to obtain compensation benefits or health care services is overwhelming and a severe barrier to obtaining help. The areas where improvements are needed fall into the following four broad areas:

I. PREPAREDNESS SHORTFALLS FOR EFFECTIVE DEFENSE AGAINST BATTLEFIELD HAZARDS EXISTED BEFORE AND DURING THE GULF WAR AND CONTINUE TODAY

When examining the range of possible Gulf War troop exposures to substances in the environment that may have caused adverse health effects, it is important to keep in mind that no war is entirely analogous to an industrial accident. This is especially true in terms of the range of precautions that can be taken and the actions that can be expected of commanders or their troops when they are under fire or threat of attack. In hindsight, of course, many things are clear that could not have been foreseen at the time, but the lessons learned from the past should not be ignored. The threats that Gulf War troops faced from potential chemical or biological warfare and from exposure to environmental hazards were not new to the Gulf War. Much could have been done by the Department of Defense and the Department of Veterans Affairs to plan for, respond to, and minimize potential troop health risks from these factors. Despite lessons learned about readiness shortfalls during the Gulf War, the DOD still is not fully prepared to fight a war where the threat exists of exposure to chemical or biological weapons. And, in the words of a scientist who has studied the effects of depleted uranium and other battlefield exposures on Gulf War veterans' health, DOD needs to ensure that in deployments the military "stops doing stupid stuff" when using chemicals, solvents, pesticides, depleted uranium, and other substances that can cause adverse health effects in persons exposed to them. Moreover, much could have been done at the VA, (particularly given its past history with veterans exposed to ionizing radiation or Agent Orange) to respond much more effectively with comprehensive planning and prompt program implementation once reports of ill Gulf War veterans began to surface.

Good information, especially intelligence information, is critical to the success of any military operation. In the Gulf War, more effective intelligence analysis and dissemination would have aided the U.S. troops conducting demolition of the Khamisiyah weapons depot, which has been shown to have been a storage site for Iraqi munitions containing nerve agents. Weaknesses in information sharing, problems with coordinating information stored in multiple databases, and incomplete file searches were critical shortcomings that contributed to this problem. With good information in hand, U.S. military commanders and their troops could have acted to minimize the range of risks they faced and the aftermath of the destruction could have been carefully monitored. Moreover, the SIU found that the lack of access to good, timely information impeded scientists' attempts to reconstruct the Khamisiyah event once the DOD eventually acknowledged that it appears that chemical weapons had been destroyed there. However, even the best intelligence and information sharing does not guarantee that troops will not be faced with chemical or biological warfare on the battlefield. Troops need to be prepared to detect reliably the presence of chemical and biological weapons and to conduct effective military operations in an environment where chemical or biological weapons may be used. This investigation confirmed that U.S. forces did not have those capabilities at the time of the Gulf War, a shortcoming which has not been fully remedied today.

The SIU found that pre-deployment training for chemical and biological warfare was, and still is, inadequate. The industrial base on which the military relies to produce protective clothing,

detection equipment, and medical vaccines and antidotes, was and likely still would be slow to respond to the needs of a major deployment in which the threat of chemical or biological weapons use exists. These and other shortfalls in preparation and in equipment capabilities have contributed to apprehensions among Gulf War veterans about their health. For example, a large number of false alarms for chemical weapons agents were sounded by detection equipment that were known to be triggered by many common battlefield substances. The resulting confusion led many serving in the Gulf War theater to be uncertain as to whether these devices were in fact warning of the presence of chemical weapons. Steps have been taken to remedy these shortfalls and some improvements have been made. Much more needs to be done to ensure that troops are well trained in the use of detection equipment and protective clothing and in minimizing risks to themselves from other potentially toxic exposures to battlefield substances like depleted uranium.

The Department of Defense's failure to plan adequately for foreseeable problems is mirrored by many inadequacies in VA's dealings with ill Gulf War veterans. The SIU found that it is difficult for Gulf War veterans to comprehend and comply with the VA's complex and confusing rules and regulations for obtaining health care or compensation benefits. Within the VA there also is widespread misunderstanding of its own policies, programs, and processes related to Gulf War veterans. Some VA health care providers do not know what needs to be done when performing veterans' physical exams required for their participation in VA's Persian Gulf Registry. In addition, not all of VA's compensation benefits staff grasp what is required to process properly Gulf War-related compensation benefits claims. This situation has contributed to poor program planning and implementation across the board for Gulf War veterans.

Finally, a forward-looking approach to understanding, identifying, and treating health effects from potentially toxic environmental exposures is key to being prepared for troop illnesses that may follow future deployments. The mission of the Department of Defense is focused on war fighting; the Department of Veterans Affairs takes care of veterans after they leave military service. Neither, however, performs the basic public health function of observing, investigating, and preventing health problems that may arise in the context of war. To help address this, it is time to consider the need for and feasibility of a national center for the study of military health, with an emphasis on post-conflict health concerns and illnesses. Such a center could draw upon the best available scientific expertise from inside and outside of government to evaluate and monitor issues related to post-deployment health concerns such as outreach and risk communication, record keeping, research, utilization of new technologies, and health surveillance. In this inherently difficult yet important area of military health, research that is conducted before illnesses occur, not after the fact, can go far to ensuring prompt and effective medical treatment, to preventing adverse health effects in the first place, and in providing clear information to veterans who may be adversely affected by such exposures.

II. INSUFFICIENT PROGRAM MONITORING HINDERS THE DEPARTMENT OF DEFENSE'S AND DEPARTMENT OF VETERANS AFFAIRS' EFFECTIVENESS IN SERVING GULF WAR VETERANS

DOD and VA have expended considerable effort, albeit sometimes reluctantly, in responding to the plight of Gulf War veterans. Both agencies did eventually take steps to address the health problems that Gulf War veterans identified. Both agencies implemented programs, such as registries for ill Gulf War veterans, that were an attempt to help identify the nature and extent of veterans' health problems. If, however, the measure of success is a solid record of ongoing and effective follow-up and monitoring efforts to determine whether Gulf War veterans are receiving the best possible care, then the DOD's and VA's programs and policies affecting Gulf War veterans have serious defects.

Failure to ensure that troop training and equipment would effectively address the range of contingencies, particularly battlefield exposures with potential health effects that the Gulf War presented, contributed to military readiness problems. In addition, there were at the time the Gulf War ended and still are nearly eight years later, serious shortfalls in the VA's monitoring and evaluation of its Gulf War veteran programs. The SIU's investigation found that the VA does not ensure actual implementation of the directives it issues from headquarters to the field on how to handle Gulf War veteran compensation claims or provide health care services. Although VA has created programs for Gulf War veterans, often at the direction of Congress, it does not regularly use reliable mechanisms to monitor the effectiveness of those programs. This failure means that the VA cannot reliably plan for the future or accurately report to the public and to Congress on program status. In addition, the DOD and VA need to make it a priority to monitor programs that provide health care to Gulf War veterans with undiagnosed illnesses, track treatment effectiveness over time, and ensure that all programs minimize barriers to timely and effective veteran participation. Finally, in order to establish a clear framework for the compensation and health care needs of Gulf War veterans, the VA should contract with an independent scientific body, such as the National Academy of Sciences, to conduct ongoing reviews of scientific literature on Gulf War veteran illnesses and health problems for purposes of providing a scientific basis to assist VA in making presumptive compensation determinations for Gulf War veterans.

III. THE DEPARTMENT OF DEFENSE'S AND THE DEPARTMENT OF VETERANS AFFAIRS' FAILURE TO COLLECT INFORMATION, RETAIN RECORDS, AND GENERATE VALID DATA ANALYSIS IMPEDES EFFECTIVE RESPONSES TO GULF WAR VETERANS

Underlying many of the problems now facing Gulf War veterans is the lack of basic data from and about that deployment. In part, this is because much useful information was never collected in the first place. In part, it is because many official documents that did record key health and operations data no longer exist or cannot be found. Even with good intelligence, a high level of preparedness to face chemical or biological weapons threats, and effective program monitoring, the ability to fully address potential hazards to troop health depends on keeping and preserving accurate records. The inability to retrieve records of events occurring during military operations—including the health

status of deployed troops—impedes the efforts of health care providers and researchers who need that information or are trying to reconstruct those events years later.

For Gulf War veterans with unexplained illnesses, the impact of this lack of information is profound. The absence of data regarding battlefield exposures limits the ability of scientists to conduct research on possible links between conditions during the Gulf War and the symptoms many Gulf War veterans now experience. This lack of data also hinders health care professionals who try to provide effective treatment to Gulf War veterans. Finally, the lack of records also impedes timely processing of compensation benefits claims because supporting information to demonstrate service connection for the veterans' health problems is unavailable.

Perhaps even more critical is the VA's chronic and pervasive inability to generate valid and reliable data about the Gulf War veterans it serves. Repeatedly, this investigation found that the statistics generated by VA databases were inaccurate and inconsistent, and that too many times the VA simply could not answer questions about Gulf War veterans such as how many have undiagnosed illnesses, how many of those veterans also are receiving compensation benefits for that condition, how many are receiving health care, and whether those who have received care at VA facilities in the past are getting better or worse. This lack of data quality and integrity related to Gulf War veterans is, moreover, representative of a larger problem with VA's information systems that has serious implications as to VA's current and future ability to provide veterans with the services that it is mandated by law as its core mission to supply.

IV. THE DEPARTMENT OF DEFENSE AND DEPARTMENT OF VETERANS AFFAIRS MUST MAKE COOPERATION AND COORDINATION A TOP PRIORITY TO ENSURE TIMELY AND EFFECTIVE SERVICE FOR GULF WAR VETERANS

The SIU's investigation found comprehensive coordination and communication problems in the ways that both DOD and VA currently provide services to Gulf War veterans. Within DOD and VA there are many offices and departments that share the mission of serving Gulf War veterans but see themselves as responsible only for their portions of that mission. In practice, however, citizens view government agencies not in isolation but as parts of a single entity working toward a common goal. It is with an integrated, goal-oriented government that all veterans—especially those from the Gulf War who are ill—should have to deal. Because the military service member of today is the veteran of tomorrow, there must be a continuum of programs, services, information sharing, and care between the Department of Defense and the Department of Veterans Affairs that attains that reality. Thus, the DOD and VA should plan jointly so that from the time individuals enter military service, steps are taken to prevent and monitor situations that may result in adverse health effects after their military service ends. In addition, offices within these agencies need to, but do not always, consistently interpret statutory and internal program guidance in ways that ensure that the mission of serving Gulf War veterans is effectively and properly carried out.

The DOD's and VA's insufficient cooperation and coordination on Gulf War issues has been paralleled by the apparent reluctance at times of both agencies to seek outside input and assistance

on their programs for those veterans. For example, these agencies have not always consistently and fully implemented comprehensive input on a timely basis from peer review panels when those agencies have engaged in primarily scientific pursuits on behalf of Gulf War veterans. This was true for the initial DOD/CIA efforts to develop a computer model of the Khamisiyah explosion and a theory about the amount and extent of chemical weapon nerve agent possibly released into the atmosphere in that event. In turn, public announcements as to the potential number of veterans who may, according to this theory, have been exposed to some level of chemical agent were made before all the underlying information and assumptions were subjected to comprehensive peer review, and the flaws and limitations of that theory were not also made public.

There are positive developments indicating that the DOD has learned from the diminished credibility and public criticism that were consequences of its failure to address fully Gulf War veterans' concerns. Establishment of the Office of the Special Assistant for Gulf War Illnesses (OSAGWI) in 1996 has increased the flow of information to veterans and the public about various events during the Gulf War that may have affected the health of the veterans who served there. OSAGWI has also made efforts to solicit from Gulf War veterans their concerns about their health and possible exposures and should continue these efforts. The new Gulf War Oversight Board, created in April of 1998 by the President, chaired by former Senator Warren Rudman and with former Secretary of Veterans Affairs Jesse Brown serving as vice-chair, will provide a vehicle for continued monitoring of OSAGWI's work in the future.

There also are positive signs that new leadership at the VA has the will and the means to address and remedy the problems identified in this report. Just as the DOD has begun to apply lessons learned from the variety of Gulf War investigations, so too is the VA beginning to overcome the institutional inertia that characterized the early stages of its Gulf War programs.

CONCLUSION

The men and women who have served in our nation's military deserve better than what ill Gulf War veterans have experienced. They deserve to get answers from the government when they ask legitimate questions about what has happened to them during their deployment. They deserve to have the government promptly and fully investigate if the answer to those questions is not known. They deserve to have access to appropriate medical care in a timely and effective way and they deserve to be confident that their reports of health problems will be treated seriously and without contempt. They deserve to have funding of scientific research awarded in a scientifically sound and impartial way. When applying for service-connected disability compensation, Gulf War veterans deserve to have their claims reviewed and resolved promptly and with a minimum of bureaucratic hurdles for them to clear.

The government failed to meet these reasonable expectations in the past and, as a result, lost credibility with many Gulf War veterans, members of Congress, and the public. The lingering effects of that lost credibility make it much more difficult for the DOD and VA to be seen as fully responsive now to the needs of Gulf War veterans in implementing effective programs. Those agencies now must work even harder to demonstrate their empathy with and responsiveness to Gulf War veterans' health problems. To ensure that Gulf War veterans in the future receive quality and timely service from the DOD and particularly from VA, the DOD and VA should report back to the appropriate committees of Congress one year after the release of this report to describe the status of their efforts to implement the recommendations made here and to correct any other deficiencies identified in this report.

Some questions Gulf War veterans have about their health may never be answered. Scientific experts likely will debate for years the causes of these veterans' unexplained illnesses. But the search for answers should not supplant the primary responsibility of the Departments of Defense and Veterans Affairs to ensure that these veterans receive timely and effective health care and appropriate compensation benefits. This is an opportunity to learn the lessons from the Gulf War so that during or after a future conflict the mistakes of the past will not be repeated. America's Gulf War veterans, who may never know the origin of their illnesses but who nevertheless put themselves in harm's way when their country called, deserve no less.

RECOMMENDATIONS

I. PREPAREDNESS SHORTFALLS FOR EFFECTIVE DEFENSE AGAINST BATTLEFIELD HAZARDS EXISTED BEFORE AND DURING THE GULF WAR AND CONTINUE TODAY

1. The Secretary of Defense should create a single focal point in unified commands to gather, analyze, and report all intelligence information in support of any military operation in order to avoid the information sharing and communications failures that occurred during the Gulf War. The Director of Central Intelligence must fully coordinate and cooperate in ensuring this unified approach.
2. Training of and instructions to intelligence analysts at the Central Intelligence Agency, Defense Intelligence Agency, and Department of Defense should ensure awareness of historical and collateral facts and situations that may affect how they interpret and handle intelligence data.
3. The Secretary of Defense must make chemical and biological warfare training a high priority to remedy equipment, medical, and other readiness shortfalls that occurred during the Gulf War and continue today.

4. The Secretary of Defense should establish troop training and safety programs to minimize possible health hazards from contact with depleted uranium.
5. The Assistant Secretary of Defense for Health Affairs should develop awareness and treatment doctrine to identify possible troop exposures to depleted uranium (DU) on and off the battlefield and fund research into the health effects of DU exposure. The Departments of Defense and Veterans Affairs should also utilize the existing VA Depleted Uranium Medical Follow-Up Program to provide timely and in-depth medical evaluations to active duty troops and veterans with DU injuries.
6. The Assistant Secretary of Defense for Health Affairs, in collaboration with VA and the Department of Health and Human Services, should develop and implement integrated policies and programs that incorporate health lessons learned from the Gulf War, including data collection and retention, surveillance, and protection and monitoring of troop health during deployments.
7. The Secretary of Defense should establish a program to improve the capacity for rapid and early detection of exposures that may affect troop health during and after deployments, such as through funding the U.S. Centers for Disease Control and Prevention to develop technology to rapidly screen persons exposed to a wide range of chemical toxicants, including chemical warfare agents.
8. Congress should direct an independent scientific body, such as the National Academy of Sciences, to evaluate the need for and feasibility of a new national center for the study of military health, with an emphasis on post-conflict health concerns and illnesses.
9. The Secretary of Veterans Affairs should contract with an independent scientific body, such as the National Academy of Sciences, to provide an ongoing review of the scientific literature to assess the nature of associations between illnesses and exposure to toxic agents and environmental or other wartime exposures as a result of service in the Persian Gulf War for purposes of determining a service connection relating to such illnesses.

II. INSUFFICIENT PROGRAM MONITORING HINDERS THE DEPARTMENT OF DEFENSE'S AND DEPARTMENT OF VETERANS AFFAIRS' EFFECTIVENESS IN SERVING GULF WAR VETERANS

1. The Secretary of Defense and Secretary of Veterans Affairs should undertake a major effort to monitor on an ongoing basis the treatment provided to ill Gulf War veterans, especially those with unexplained illnesses, to determine whether those veterans are getting better or worse over time. Both agencies should evaluate and revise existing health care programs to remove or minimize barriers to timely and effective veteran participation in them. The Secretary of Defense and Secretary of Veterans Affairs also should jointly develop and implement methods

to monitor the health status of Gulf War veterans over time to provide early detection of future illnesses which may emerge years later, such as higher rates of cancers.

2. A new Assistant Secretary at the Department of Veterans Affairs should be created with responsibility for overseeing programs for addressing battlefield illnesses and other health issues that arise in connection with past and future deployments. Among this official's responsibilities would be oversight and coordination of research, treatment, and compensation efforts in this area.
3. The Secretary of Veterans Affairs should develop and implement joint training programs for compensation claims decision makers, examining physicians, Board of Veterans' Appeals decision makers, and others who coordinate or administer Gulf War veterans programs to ensure a common awareness and understanding of programs and activities involving unexplained illnesses.
4. Quality assessment of Gulf War veterans' compensation claims at the Department of Veterans Affairs should be conducted and validated by expert teams drawn from the Compensation and Pension Service, the Board of Veterans Appeals, and the Office of General Counsel. The Secretary of Veterans Affairs should implement and monitor corrective action.
5. The VA Office of the Inspector General should undertake a comprehensive assessment of VA medical facilities' compliance with Veterans Health Administration Central Office health care policies and programs on Gulf War veterans and should monitor corrective action taken.

III. THE DEPARTMENT OF DEFENSE'S AND DEPARTMENT OF VETERANS AFFAIRS' FAILURE TO COLLECT INFORMATION, RETAIN RECORDS, AND GENERATE VALID DATA ANALYSIS IMPEDES EFFECTIVE RESPONSES TO GULF WAR VETERANS

1. The Secretary of Defense should reinforce compliance with current statutory and regulatory requirements that all records, logs, and other documents related to wartime and other military operations that are permanent records under the law are retained, and require that all unified commanders demonstrate this duty is being implemented and understood as a priority at every level in that command.
2. The Secretary of Defense should implement a personnel tracking system, such as that now being developed by the U.S. Army Center for Health Promotion and Preventive Medicine, in order to track and identify where individual service members were located during military operations.
3. The Secretary of Veterans Affairs should direct development of a consolidated examination protocol for Gulf War veterans that can be used both to determine eligibility for service-

connected disability compensation and provide necessary data for participation in the VA's Persian Gulf War Registry program.

4. The Secretary of Veterans Affairs should utilize team and case management approaches to serving Gulf War veterans with unexplained illnesses so that claims processors and health care providers jointly participate in and provide input to service-connected benefits eligibility decisions.
5. The Secretary of Veterans Affairs should require all Veterans Health Administration medical facilities to provide information to Gulf War veterans on how to apply for compensation benefits when they communicate to those veterans the results of their Persian Gulf Registry examination. All Veterans Benefits Administration regional offices should be required to provide Gulf War veterans with information on how to participate in the VA's Persian Gulf Registry program when they communicate with those veterans on compensation claims they have filed.
6. The Secretary of Veterans Affairs should expand the current Persian Gulf Registry to fully comply with the requirements for a Gulf War veteran national data base that was mandated by Congress in the Veterans Health Care Act of 1992.
7. The Secretary of Defense should direct that complete and accurate medical information is collected and maintained on all troops, from base-line physical examinations to all immunizations and administration of medical products occurring on and off the battlefield. This includes directing that reservists, as well as active duty military personnel, who are deployed receive health assessments before and after deployments.
8. The Secretary of Defense and Secretary of Veterans Affairs should, in collaboration with the national, state-based birth defects registry under development, establish a birth defects registry for military service members to gather statistics on possible reproductive health effects stemming from battlefield exposures.

IV. THE DEPARTMENT OF DEFENSE AND DEPARTMENT OF VETERANS AFFAIRS MUST MAKE ONGOING COOPERATION AND COORDINATION A TOP PRIORITY TO ENSURE TIMELY AND EFFECTIVE SERVICE FOR GULF WAR VETERANS

1. The joint DoD/CIA Khamisiyah plume modeling effort, and future similar efforts, should be peer reviewed by experts from inside and outside of government and the results of that peer review made public.
2. The Secretary of Veterans Affairs should create in each of VA's Veterans Integrated Service Networks a working group on Gulf War illnesses that should meet at least quarterly to provide

input on implementation of VA health care and compensation programs for Gulf War veterans. Members should include Gulf War veterans, veterans advocates and representatives from veterans service organizations, VA Persian Gulf physicians and coordinators, and senior Veterans Health Administration and Veterans Benefits Administration officials whose responsibilities include implementation of these programs.

3. The Secretary of Defense and Secretary of Veterans Affairs should maintain compatible information systems, collect registry information that can be meaningfully analyzed and compared, and implement methods for regular exchange of information on the health status of and effective treatments for Gulf War veterans.
4. The Department of Defense, in consultation with the Environmental Protection Agency and the Centers for Disease Control and Prevention, should make available to military commanders environmental intelligence about factors that could adversely affect troop health and thereby impede the successful achievement of military missions.
5. The Secretary of Veterans Affairs should direct that veterans be provided clear and candid information about pertinent environmental risks they may have experienced during deployments that may have had an adverse impact on their health.
6. The Secretary of Defense and Secretary of Veterans Affairs should contract with an independent scientific body to evaluate treatment protocols that have been useful for persons in the general population who suffer from illnesses similar to Gulf War veterans' unexplained illnesses and to recommend funding of appropriate clinical programs and research in this area. The Secretary of Defense and Secretary of Veterans Affairs should only fund Gulf War health research pursuant to an impartial, scientific peer review process, except in the case of the most serious and extreme circumstances.
7. The Secretary of Defense and Secretary of Veterans Affairs should independently report to the appropriate committees of Congress on progress made to implement the recommendations and remedy deficiencies identified in this report within one year of the date this report is issued.